

STATE COASTAL CONSERVANCY

Staff Recommendation

October 30, 1985

LOS PENASQUITOS LAGOON ENHANCEMENT PLAN

File No. 78-046

Project Manager: Don Coppock

REQUESTED ACTION: (1) Approve the Los Penasquitos Lagoon Enhancement Plan and transmit it to the Coastal Commission, the cities of Del Mar and San Diego, and the State Department of Parks and Recreation, (2) approve the negative declaration prepared for implementation of the Plan, and (3) authorize the Executive Officer to approve up to \$76,000 of disbursements from the Los Penasquitos Lagoon Enhancement Fund escrow accounts to the Los Penasquitos Lagoon Foundation for implementation of the Plan.

SHORT DESCRIPTION: The Enhancement Plan, developed by the Los Penasquitos Lagoon Foundation and the State Coastal Conservancy, proposes measures for restoring and enhancing the environmental qualities of Los Penasquitos Lagoon. The disbursements would make use of mitigation fees paid by watershed developers to open the lagoon mouth, fence sensitive wetland areas, restore habitat, and establish a monitoring program.

LOCATION: Los Penasquitos Lagoon is located in the northern part of the City of San Diego, about 16 miles north of downtown, between Interstate 5 and the Pacific Ocean, South Coast District (Exhibit 1 of the attached Negative Declaration).

PROGRAM CATEGORY: Resource Enhancement/Nonprofit

ESTIMATED COST: \$76,000 from Los Penasquitos Lagoon Enhancement Fund

STAFF RECOMMENDATION: Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Chapter 6 of the Conservancy's enabling legislation (Public Resources Code Sections 31251-31270):

"The State Coastal Conservancy hereby approves the Los Penasquitos Lagoon Enhancement Plan (Exhibit 1) and authorizes its transmittal to the Coastal

Commission for determination of consistency with the applicable local coastal programs and the Coastal Act, and its transmittal to the cities of San Diego and Del Mar and to the Department of Parks and Recreation for review and comment. The Conservancy also approves the negative declaration prepared for the implementation of the Plan (Exhibit 2) and authorizes the Executive Officer to approve up to seventy-six thousand dollars (\$76,000) of disbursements from the Los Penasquitos Lagoon Enhancement Fund escrow accounts to the Los Penasquitos Lagoon Foundation to open the lagoon mouth, clear vegetation from least tern nesting sites, fence portions of the perimeter of the wetland to prevent illegal vehicular access, establish a monitoring program, and to help administer the enhancement fund.

The authorization is subject to the following conditions:

1. The Los Penasquitos Lagoon Foundation shall submit monthly reports to the Conservancy providing results of the monitoring program, descriptions of each effort to open the lagoon mouth and its consequences, a list of coastal development permit applications requiring deposits to the Los Penasquitos Lagoon Enhancement Fund, as well as a list of new deposits to the fund and any expenditures associated with this grant.
2. No funds shall be disbursed for opening the lagoon mouth until the Foundation documents that it has obtained all necessary permits for the project and has complied with all applicable laws and regulations.
3. No funds shall be disbursed for clearing vegetation from least tern nesting sites until the Executive Officer approves an easement, license agreement, or similar instrument allowing this activity on private property.
4. No funds shall be disbursed for fencing sensitive wetland areas until the Executive Officer approves (a) a final design and budget, (b) an easement, license agreement, or similar instrument allowing construction of such a fence and (c) an agreement sufficient to protect the public interest in the improvement constructed under the term of this grant.

5. No funds shall be disbursed for annual maintenance and operation of stream gauges unless the Foundation demonstrates to the satisfaction of the Executive Officer that no other funding source, including the Department of Parks and Recreation, can supply the required funds.

Staff further recommends that the Conservancy adopt the following findings in support of the recommended resolution, based upon the discussion and analysis contained in this staff recommendation:

"1. The Los Penasquitos Lagoon Enhancement Plan is consistent with the purposes and objectives of Chapter 6 of the Public Resources Code (Sections 31251-31270);

2. The proposed disbursement is consistent with the guidelines and criteria set forth in the Coastal Resource Enhancement Program Announcement;

3. Based on the Negative Declaration attached as Exhibit 2 of the accompanying staff report and public comments received, there is no substantial evidence that the proposed projects to implement the Plan would "have a significant effect on the environment" within the meaning of the CEQA (Public Resources Code Sections 21000 et seq.);

4. The restoration and enhancement of Los Penasquitos Lagoon is identified in the certified portions of the City of San Diego North City Local Coastal Program as requiring public action to resolve existing or potential resource protection problems; and

5. The Los Penasquitos Lagoon Foundation is a nonprofit organization eligible to receive grants existing under the provisions of Internal Revenue Code Section 501 (c) (3) and having among its principle purposes the preservation of land for scenic, ecological, and open space opportunities and is therefore eligible to receive grants under the Conservancy's Nonprofit Assistance Program."

STAFF SUMMARY: Los Penasquitos Lagoon is important as one of the few remaining Southern California coastal wetlands. The State Department of Fish and Game ranked the lagoon as one of 19 coastal wetlands most in need of acquisition and protection.

The Los Penasquitos Lagoon Enhancement Plan, attached as Exhibit 1, describes the measures that are currently planned for restoring and enhancing the environmental quality of Los Penasquitos Lagoon. The larger Enhancement Plan and Program document, distributed separately, provides additional background. It also describes specific projects called for in the plan that are eligible for funding from lagoon enhancement fees that watershed developers pay as a means of mitigating impacts of their developments.

The result of two years of hearings and consensus-building by a broad range of interested parties, the Los Penasquitos Lagoon Enhancement Plan presents a consensus for action. It offers an exemplary demonstration of cost-effective ways of using mitigation funds contributed by private developers to enhance public resources.

The Los Penasquitos Lagoon Foundation will play a major role in carrying out the recommendations of the plan, administering a grant that will cover the major initial enhancement actions. The Foundation will give regular reports to the Conservancy evaluating the success of the program.

STAFF DISCUSSION
Site Description-

The Enhancement Program and Plan defines a 636 acre lagoon system classified as wetlands. This includes about 350 acres of coastal salt marsh, 33 acres of tidal channels, 212 acres of shrub-scrub and forested riparian vegetation, and small areas of cattail marsh, remnant sand dune, and wetland transition vegetation. The Plan also addresses problems, opportunities and trends in related upland areas and in the entire 95 square mile watershed of the lagoon.

Site History-

In the past 60 years Los Penasquitos Lagoon has evolved from a tidal estuary to a lagoon that is closed to tidal action for long periods of time. The major factors degrading the lagoon have been (1) the construction of a railroad embankment that cut off lagoon channels, (2) the construction of North Torrey Pines Road along the barrier beach that restricted the location of the lagoon mouth, (3) construction of the North Beach Parking Lot in historic tidal areas, (4) increased sediment from

changing land uses upstream, and (5) decreased water quality from urban runoff and sewage effluent.

Project History-

Over the last two decades, several efforts have been made to enhance the environment of Los Penasquitos Lagoon. These efforts are described in detail in the Enhancement Program and Plan.

There are now proposals to urbanize much of the watershed of the lagoon. The Coastal Commission has determined that the proponents of these projects can mitigate off-site impacts of their developments if they contribute to a lagoon enhancement fund to restore and enhance the downstream lagoon. To equitably spread the costs among the watershed developers, the Coastal Commission divided the estimated enhancement costs by the number of proposed homes to arrive at a fee in lieu of off-site mitigation. Since the program was first established in 1982, it has expanded to cover commercial and industrial developments. However, it only affects the portion of the watershed within the Coastal Zone.

Fees are paid into a Los Penasquitos Lagoon Enhancement Fund which has been jointly administered by the State Coastal Conservancy and the Coastal Commission. These contributions are held in interest-bearing escrow accounts, from which money can only be disbursed for "bona fide lagoon enhancement activities", as defined by the Coastal Commission. According to the terms of the escrow instructions, both the Executive Officer of the Coastal Conservancy and the Executive Director of the Coastal Commission must authorize any disbursement. Staff has been advised by the office of the Attorney General that this is an appropriate way of managing funds entrusted to the Conservancy for the limited purpose of carrying out the condition of coastal development permits. A description of payment received and the enhancement activities funded so far is included in the Project Financing section of this staff report.

In the fall of 1983 a local nonprofit organization, the Los Penasquitos Lagoon Foundation, was organized to help restore Los Penasquitos Lagoon. Under the Foundation's Articles and Bylaws the Coastal Conservancy appoints the organization's nine Directors. In October 1983 and again in February and November, 1984, the Conservancy acted to appoint directors and received status reports on the project.

Assisted by a technical advisory committee of involved agencies and individuals, the Foundation directors have overseen preparation of a number of background studies and

have helped select the policies for the enhancement plan. The Foundation also held two public workshops to elicit suggested policies for the plan. Finally on August 21, 1985 the Foundation approved the Plan (with final modifications that are included in the version now before the Conservancy) and forwarded it to the Conservancy for approval.

Project Description-

The Plan. The Los Penasquitos Lagoon Enhancement Plan lists 43 actions necessary to restore and enhance the lagoon. It is attached as Exhibit 1. Conservancy Board members will receive a larger document, the Los Penasquitos Lagoon Enhancement Program and Plan, which also includes descriptions of the current situation and suggestions for plan implementation, in addition to the plan itself. However, it is only the policy statements of the Plan that staff recommend the Conservancy officially approve and transmit to the appropriate review agencies. The background information, appendices, and cost estimates, although useful in understanding the program, do not need to be officially approved.

There are eight components or groups of policy statements that comprise the plan. Each of these components is described further in Exhibits 1 and 2.

Plan Review. Staff recommends that the Conservancy authorize transmittal of the plan to local agencies and the Coastal Commission for their consideration and for local review and comment. Because the plan boundary includes lands within both the cities of Del Mar and San Diego, and certified land use plan policies do not exist for important portions of the plan area, the Coastal Commission is the appropriate body under Public Resources Code Section 31258 to determine consistency with the local coastal programs (for certified areas) and with the policies of the Coastal Act (for areas which are not certified).

At the same time, staff is recommending transmittal of the plan, pursuant to Public Resources Code Section 31264, to the cities of Del Mar and San Diego, and to the Department of Parks and Recreation (as a State agency exercising resource management responsibility over the portions of the lagoon within the Torrey Pines State Reserve). For the City of Del Mar, the transmittal will ask for review and comment, and possible assistance in providing a bulldozer for opening the lagoon mouth. For the City of San Diego, the transmittal will list specific implementing actions for the City to consider undertaking, in addition to reviewing and commenting on the plan. The recommended

implementing actions for the City of San Diego are described further below.

Plan Implementation. The Enhancement Plan and Program document recommends a division of implementation responsibilities among different agencies, estimates preliminary costs and identifies potential funding sources. It also identifies 17 agencies or groups that will need to either issue permits or otherwise approve the actions proposed in the plan. The recommendations do not bind or commit the named agencies to a course of action; they merely indicate which group appears most able to carry out the particular policy.

The program indicates that the major agencies or groups involved in implementing the plan should be: (1) the Los Penasquitos Lagoon Foundation (responsible for monitoring, opening the lagoon mouth, some habitat restoration, and improving circulation), (2) the State Department of Parks and Recreation (responsible for expanding park areas, some habitat restoration, and installing access improvements on public property), (3) the State Coastal Conservancy (also responsible for some acquisitions and for evaluating ways to reduce the flow of sediment into the lagoon), (4) the City of San Diego (responsible for preventing increases in the flow of sediment in cooperation with watershed developers), and (5) the California Coastal Commission and the Department of Fish and Game (responsible for requiring mitigation of proposed wetland developments).

The recommended agency responsibilities are given in Table 5 of the Enhancement Program and Plan, which is reproduced as Exhibit 3. For example, when the plan is transmitted to the City of San Diego, Conservancy staff will specifically ask the City to consider taking lead agency responsibility for accepting hillside easements, developing a viewpoint at Sorrento Valley Road hill, preserving sediment storage areas, establishing a benefit assessment district, and maintaining a natural stream channel in Sorrento Valley. The table also indicates that the City may be able to assist in some property acquisition and circulation improvements, and virtually all actions involving sedimentation control and mitigating wetland developments.

Foundation Grant. As a first step in plan implementation, the Los Penasquitos Lagoon Foundation has applied for permits to open the lagoon mouth with bulldozers as suggested in the plan. The Foundation also submitted to the Conservancy a proposal for a \$76,000 disbursement from the Los Penasquitos Lagoon escrow accounts to cover

Exhibit 2: Previous Staff Recommendation

specific actions listed as its responsibility in the enhancement program. The identified tasks are: opening the lagoon mouth to tidal action, monitoring the current conditions and effects of the lagoon mouth openings, monitoring stream flow and sedimentation, clearing brush for least tern nesting sites, and fencing portions of the wetland to prohibit illegal vehicular entry. These tasks are all included in the enhancement plan, and the Foundation's cost estimates are consistent with the preliminary estimates provided in the Plan. In addition, the Foundation proposes to take a more extensive role in assisting permit applicants to make deposits into the Enhancement Fund, relieving the Conservancy staff of some of this responsibility.

The Foundation's proposal includes recommended improvements on property that is currently privately owned. The authorization is conditioned on approval of easements, license agreements, or other instruments allowing for these activities. In addition, the proposal requests a disbursement for annual operating expenses of stream gauges in the Lagoon watershed. These costs were originally proposed to be borne by the Department of Parks and Recreation, and the disbursement is conditioned on documenting the unavailability of other funding sources before enhancement funds are used for this purpose.

If the Conservancy authorizes the Executive Officer to make this disbursement, the proposal will also need to be submitted for approval to the Executive Director of the Coastal Commission before funds can be released from the escrow accounts.

PROJECT FINANCING: As of September 26, 19 watershed developers had contributed a total of \$195,002 to the Los Penasquitos Lagoon Enhancement Fund, and \$5,000 has been earned in interest. In addition, the Executive Officer has signed agreements with three major watershed developers which commits them to deposit an additional \$485,942 over time as their projects move forward. There is more than enough money in the escrow accounts to cover the recommended grant to the Los Penasquitos Lagoon Foundation.

The following table describes the disbursement authorized from the Enhancement Fund, the actual expenditures to date, and the purpose of each disbursement.

<u>Purpose</u>	<u>Authorized</u>	<u>Expended</u>
<u>Background Studies.</u> the engineering firm of Leedshill-Herkenhoff modelled the hydrology and hydraulics of the lagoon, analyzed the tidal prism, and proposed nine alternative enhancement measures. Biologists working for Woodward-Clyde Consultants mapped and described the lagoon habitat and the environmental effects of each alternative.	\$59,510.00	56,366.22
<u>Preparation of Enhancement Program.</u> Leedshill-Herkenhoff and Woodward-Clyde drafted sections of the enhancement program dealing with hydrology, natural resources, opening the lagoon mouth, and impacts of the enhancement plan, as well as technical appendices.	\$26,148.00	26,079.51
<u>Public Review.</u> A grant to the Los Penasquitos Lagoon Foundation allowed this group to hold two public workshops on the plan, as well as monthly study and review sessions, to publish the draft plan and prepare graphics, and to assist in administering the escrow accounts.	\$6,300.00	6,300.00
<u>Stream Gauges.</u> The Enhancement Fund provided one-quarter of the cost of installing stream gauges to monitor runoff and sedimentation. The City of San Diego and the U.S. Geologic Survey also contributed to this project.	\$6,375.00	6,375.00
<u>Escrow Account Fees.</u> Initial fee of \$300 plus annual maintenance fee and fees for each deposit and withdrawal.	\$670.00	670.00
TOTAL	\$99,003.00	95,790.73

In addition, the Los Penasquitos Lagoon Foundation received a donation of \$32,500 from San Diego Gas and Electric Company to prepare ecological studies of the

Exhibit 2: Previous Staff Recommendation

lagoon, including property the Company owns. This resulted in a survey of lagoon birds, a wetland boundary determination, and an analysis of the impacts of the enhancement plan.

LOCAL SUPPORT: The Los Penasquitos Lagoon Enhancement Plan and Program was developed over a two year period with a substantial amount of local review and comment, both at workshops organized for that purpose, and at monthly meetings of the Los Penasquitos Lagoon Foundation. The City of San Diego has indicated that it is supportive of the major goals and policies contained in the plan and is anxious to take a lead role in their successful implementation (Exhibit 4).

CONSISTENCY WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT:

On the basis of an Initial Study which showed no substantial evidence that the actions called for in the Enhancement Plan would have a significant effect on the environment, staff prepared a proposed Negative Declaration for this project pursuant to State Guidelines (California Administrative Code, Title 14, Chapter 3) for implementing the California Environmental Quality Act (Public Resources Code Sections 2100 et seq.) (Exhibit 2) Comments received from the Coastal Commission (Exhibit 5) encourage the Conservancy to coordinate the Enhancement Plan with the City of San Diego Local Coastal Program North City Land Use Plan. CalTrans requested that the Plan be coordinated with the major freeway construction project currently under study by CalTrans and that plans and calculations for controlling sedimentation be submitted to CalTrans for review (Exhibit 6). San Diego Gas and Electric Company is supportive of efforts to enhance the lagoon and expressed no specific comments on the plan (Exhibit 7). Staff will follow-up with the necessary coordination. On the basis of the negative declaration and comments, staff recommends the Conservancy find that the proposed project would not have a significant effect on the environment.

CONSISTENCY WITH CONSERVANCY LEGISLATION:

The proposed action is consistent with Chapter 6 of the Conservancy's enabling legislation (Public Resources Code Sections 31251 to 31270), and specifically with Section 31251 which provides for the enhancement of coastal resources which have suffered a loss of natural and scenic values. As summarized in the "Site History" section, a number of manmade intrusions in the wetland area have caused the lagoon to evolve from a tidal estuary to a

lagoon that is closed to tidal action for long periods of time.

Section 31257 calls for the preparation of resource enhancement plans and Section 31258 mandates forwarding the plan to the Coastal Commission for determination of the consistency when the plan affects more than one jurisdiction, where the Land Use Plan for the area is not certified, or when amendments to the Local Coastal Program would be required. Each of these conditions pertain to the case of Los Penasquitos Lagoon. The majority of the study area falls within the jurisdiction of the City of San Diego, but about 40 acres are within the Del Mar city limits. Del Mar does not have a certified land use plan, and important areas of the Los Penasquitos study area within the City of San Diego do not have certified land use policies.

Section 31252 requires that an enhancement area be identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource protection problems. The certified City of San Diego North City Land Use Plan specifically states that the City should undertake a special coastal restoration project with the State Coastal Conservancy for Los Penasquitos Lagoon.

Section 31264 requires the Conservancy submit an enhancement plan it proposes to implement to the local public agency which exercises land use regulation over the area and to any state agency which exercises resource management responsibility in the project area for their review and comment. The staff recommendation includes authorization to submit the plan to the cities of San Diego and Del Mar and the State Department of Parks and Recreation.

CONSISTENCY WITH
CONSERVANCY
GUIDELINES:

The Los Penasquitos Lagoon Enhancement Plan is consistent with Conservancy resource enhancement program guidelines. The plan is broad in scope resolving a range of issues that have plagued the lagoon area for years. These include lack of tidal action, poor circulation of lagoon waters, sedimentation from upstream watersheds, unrestricted public access in sensitive areas, as well as development proposals that propose fill in designated wetlands. The Plan can serve as a model for financing enhancement of other wetlands through developer fees. The lagoon's resources are of statewide significance being named as one of 19 most important coastal wetlands and providing habitat for endangered species. The plan was

prepared in cooperation with concerned landowners, nonprofit organizations, government entities and interested citizens. The local jurisdictions and the other involved regulatory agencies have expressed their support for the plan. The Conservancy is ready to proceed with timely project implementation due to the availability of enhancement funds, and the the Foundation's headstart in obtaining necessary permits. Finally, there is urgency to this authorization because efforts to open the lagoon mouth should begin before the winter rains.

APPLICABLE
COASTAL ACT
POLICIES:

The Los Penasquitos Lagoon Enhancement Plan is consistent with Chapter 3 of the California Coastal Act (Public Resources Code Division 20, Section 30000 et seq.). Specifically restoration of Los Penasquitos Lagoon is consistent with Section 30231 which provides that the biological productivity and the quality of coastal waters, streams, wetlands, estuaries be maintained and, where feasible, restored. Coastal Act policies regarding mitigation for wetland developments (Sections 30233 and 30607.1) are included in the Enhancement Plan as Policies 3.3.8.1, 3.3.8.2, and 3.3.8.3.

The Los Penasquitos Lagoon Enhancement Fund was specifically established to carry out Coastal Act objectives by providing a mechanism to mitigate off-site impacts of developments in the lagoon watershed. These impacts are identified as increased runoff volume and decreased water quality. The Coastal Commission found in almost two dozen permits that the effects of development on the resources of Los Penasquitos Lagoon would be effectively mitigated by the restoration effort funded through the enhancement fees. Without expenditures from the escrow accounts to enhance the lagoon, watershed development could not be found consistent with Policy 30231.

CHAPTER THREE
THE ENHANCEMENT PLAN

3.1 INTRODUCTION

The Los Penasquitos Lagoon Enhancement Plan describes the measures that are currently planned for restoring and enhancing the environmental quality of Los Penasquitos Lagoon. The Plan itself consists of the goal statements (Sections 3.2), the Plan Elements (Section 3.3), and the Enhancement Plan Map (Figure 12). The State Coastal Conservancy will need to approve the enhancement plan according to Public Resources Code Section 31257; the cities of San Diego and Del Mar can review and comment on the Plan and consider implementation, as specified in Public Resources Code Section 31264. Finally, in the absence of a certified Local Coastal Program for the entire area, the California Coastal Commission will need to determine that the plan is in conformance with the policies and objectives of the Coastal Act, as specified in Public Resources Code Section 31258.

The most likely measures for implementing the enhancement plan are described in Chapter 4, including responsibilities of various involved agencies, and cost estimates. These measures do not need to be officially adopted by the Conservancy, the cities, or the Coastal Commission,

EXHIBIT 1, P. 1

but will serve as guidelines for necessary future actions. The Plan will be carried out in phases over time, as some elements require immediate action, and others require more detailed planning and investigation before they can be implemented.

The elements of the plan are:

(1) monitoring; (2) opening the lagoon mouth; (3) expanding park and open space areas; (4) improving circulation; (5) restoring habitat; (6) providing public access; (7) controlling sedimentation; and (8) mitigating wetland developments. Each of these components is described further in a separate section.

3.2 GOAL STATEMENT FOR LAGOON ENHANCEMENT

The following statement of goals and objectives was developed by the Los Penasquitos Lagoon Foundation and adopted on May 16, 1984. It represents the overall policy directive for the Enhancement Plan.

GOAL

To protect, maintain, and enhance Los Penasquitos Lagoon system and adjacent uplands in order to perpetuate native flora and fauna characteristic of southern California lagoons; to restore and maintain the estuarine hydrology in a regime which approaches that which existed before major modifications were made by modern man.

OBJECTIVES

1. Open the lagoon mouth regularly to enhance the health and ecological value of the lagoon.
2. Design and implement a plan to improve circulation in areas of historical tidal action.
3. Improve and maintain habitat for native species that historically inhabited and used Los Penasquitos Lagoon.

4. Provide public access and educational opportunities consistent with resource protection, and the plans and policies of the Department of Parks and Recreation and the Department of Fish and Game.
5. Protect the lagoon by reducing the amount of sedimentation and pollution that enters the lagoon and its associated uplands.
6. Consider public health and safety issues in developing the plan.
7. Minimize capital costs and annual maintenance costs.

3.3 ELEMENTS OF THE ENHANCEMENT PLAN

The Los Penasquitos Lagoon Enhancement Plan is represented in Figure 12. Each of the elements of the plan is described in greater detail below.

3.3.1 MONITORING

A monitoring program will be developed and implemented to gauge the health and ecological value of the Los Penasquitos Lagoon system. The purpose of the monitoring program will be to document changes in the functional values of the lagoon system, especially in the habitat values for birds and fish, and to evaluate the success of the various elements of the enhancement program. This will help determine the timing of implementation for other elements of the plan. The monitoring will begin before any modifications to the lagoon are undertaken to provide baseline data. The monitoring program will include the following components:

3.3.1.1

Periodically measure the physical and chemical parameters of the lagoon waters, such as water level, salinity, temperature, and dissolved oxygen.

3.3.1.2

Measure the biological parameters, including surveys of benthic invertebrates, fish, birds, and vegetation.

3.3.1.3

Measure the amount of runoff and sedimentation originating from the major lagoon tributaries, and relate this information to the amount of rainfall.

3.3.1.4

Observe and document each enhancement activity, record the duration and location of each lagoon mouth opening and the conditions under which it closes, and periodically measure channel depths.

3.3.2 OPENING THE LAGOON MOUTH

Increasing the tidal prism of Los Penasquitos Lagoon has been advocated as a way to maintain tidal action within the lagoon. The benefits of an increased tidal prism are clearly recognized. However, alternatives that would massively increase the tidal prism have been considered and rejected because of the desire to preserve existing high quality marsh habitats, and because initial analyses indicated that even with a much larger tidal prism the lagoon mouth would close

frequently. Instead, the plan uses a consciously conservative approach, experimenting with the least damaging techniques of restoring tidal action before contemplating more costly and environmentally disruptive techniques. This tradeoff may result in lower capital costs but increased maintenance expenses.

This element of the plan consists of three sub-elements: an initial low cost technique that will involve repeated maintenance, a set of criteria for evaluating success, and a moderate cost technique that will involve removing part of the cobble sill to increase the lagoon's tidal prism. Periodic maintenance will be required for each type of opening.

3.3.2.1 The Initial Low Cost Technique

First, dig a ditch from the lagoon to the crest of the beach berm using a bulldozer. Then a few hours before low tide, cut through the berm to allow the power of the outflowing lagoon water to erode the sand and cobbles from the channel and deposit them in the sea or along the beaches. The earthmoving equipment should feed cobbles and sand into the turbulent flow. It may be necessary to use earthmoving equipment for one to two days

following the opening in order to remove most of the beach material from the channel area. Repeat the process or modify it as necessary to maintain the channel.

3.3.2.2 Evaluate Success

Three types of success criteria are needed to deal with the process of lagoon mouth opening and channel maintenance: (1) criteria to determine when and how to perform preventive maintenance, (2) criteria to determine how long after the mouth closes it should be reopened, and (3) criteria to determine when the technique for lagoon mouth opening should be changed.

Maintenance work with earthmoving equipment is anticipated about one day per month, coinciding with the spring tidal period. Maintenance probably will be unnecessary during high rainfall and runoff periods. However, the advent of high waves during low runoff periods may require extra maintenance.

The monitoring program will provide data on which to base decisions about when to reopen the lagoon mouth. The criteria that should be considered include (a) danger of flooding or water pollution health hazard, (b) changes in the measured

physical parameters of the lagoon that could result in stress to marine organisms in the lagoon, (c) indications of stress to lagoon organisms, and (d) the number of days the lagoon mouth has remained closed. Every effort should be made to prevent closure of the lagoon for periods longer than one month.

After a one-year trial period, if the annual costs of opening and maintaining the lagoon mouth using the initial technique are higher and are expected to remain higher than the projected costs of opening and maintaining the mouth by the alternative technique (described in Section 3.3.2.3. below), the alternative technique should be evaluated further in comparison to other low cost experimental techniques. A brief feasibility and cost study of these other methods for keeping the lagoon entrance opened should be conducted at that time. These alternatives may include fluidization, removing gravel from the channel, and using mobile jetting equipment, among others. If that analysis shows that any of these alternatives are less costly than the alternative technique proposed in the next section, they should be tried first.

3.3.2.3 Moderate Cost Technique

In the hope of reducing periodic maintenance costs, a combination bulldozer/dragline operation would be used to excavate a channel deeper and wider than the channel created with the initial technique. This may increase the tidal prism of the lagoon from its present 3.1 to a maximum of 5.2 million cubic feet and cut through the cobble sill. Because of the large amount of cobbles removed from below MSL, it might be easier to reopen this channel than to reopen the channels created by the initial technique once it is closed by deposition.

This technique involves first, using a bulldozer to excavate a channel above the tidal range from the shoreline into the deep channel area of the lagoon. Then using a dragline for work within the tidal range, deepen the channel to -5 feet MSL, with a 40 foot bed width. Disposal of excavated material should avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported to the beach or into suitable longshore currents.

3.3.3 EXPANDING PARK AND OPEN SPACE AREAS

The North City Land Use Plan and the Torrey Pines State Reserve General Plan both support acquisition of wetlands and related critical habitat areas and buffers not now a part of the Torrey Pines State Reserve. In addition, the recovery plans for the light-footed clapper rail and the California least tern both call for additional acquisitions at Los Penasquitos Lagoon. The following actions would carry out these directives:

3.3.3.1

Transfer portions or all of the SDG&E property west of Sorrento Valley Road (226 acres) to the State of California as additions to the Torrey Pines State Reserve. Explore with the owners possibilities of fee title acquisition, transfer of development to other properties under the same ownership, donations, or purchase as mitigation for major development proposals that will affect the lagoon.

3.3.3.2

Transfer the Sorrento Associates property (20 acres) to the State of California as a second addition to the State Reserve. Also explore with the landowners alternative ways of accomplishing the transfer.

3.3.3.3

Transfer the Wyer property (6 acres) to public ownership to preserve open space upland areas related to the lagoon system. Alternatively, private development should be clustered on the upper portions of the site to buffer the adjacent potential marsh restoration site.

3.3.3.4

Arrange protection for the wildlife link between Los Penasquitos Canyon Preserve and the Los Penasquitos Lagoon area. Explore with Cal Sorrento the possibilities of fee title acquisition, transfer of development to other properties, donations, partial development and dedication, or land swaps for other property.

3.3.3.5

Provide an open space corridor between the Torrey Pines State Reserve Extension and the Lagoon area.

3.3.3.6

Accept and enforce open space easements over prominent bluffs and hillsides that form a visual backdrop to Los Penasquitos Lagoon. The managing agency or group should arrange funding to cover the costs of monitoring and enforcing these easements if it accepts this

responsibility. In instances where the City does not accept an easement or requirements for monitoring and enforcement exceed those ordinarily undertaken by the City, the Los Penasquitos Lagoon Foundation may assume these responsibilities.

3.3.4 IMPROVING CIRCULATION

Applying the moderate cost technique to open the lagoon mouth may not increase the lagoon tidal prism enough to maintain the opening. The monitoring program may indicate that tidal action is not penetrating or flushing the shallow channels west of the railroad embankment. Stagnant pools of water may continue to breed mosquitos. Improving the circulation of lagoon waters in existing channels and restoring channels to their natural condition is the preferred approach to deal with any of these problems that may arise. In addition, this will help mitigate the adverse impacts caused by past filling of wetland areas. This element will involve the following actions:

3.3.4.1

Prepare topographic map of the tidal channels with one foot contours. Also prepare bid documents and specifications for proposed alterations.

EXHIBIT 1, p. 5

3.3.4.2

Jack culverts through the railroad embankment to increase both tide and flood flows in the lagoon channels on the west side of the embankment, thereby better approximating their historical circulation and flushing characteristics.

3.3.4.3

Reconnect and deepen existing historical channels west of the railroad berm. This will increase the lagoon tidal prism and improve flushing through the culverts under the railroad embankment. Connecting isolated ponds and the abandoned oxidation ponds to the tidal channels with small drainage ditches will help control mosquitos.

3.3.4.4

Install culverts under the North Beach parking lot access road to increase tidal flushing along the east side of the railroad embankment. Expand the width of the channel in this area to increase the tidal prism and return tidal flushing to the area north of the road. This may involve redesign of the roadway.

3.3.5 RESTORING HABITAT

Opening the lagoon mouth to restore tidal action and improve circulation

of lagoon waters will be the most significant habitat improvement. Beyond this, habitat improvements should be guided by what occurs naturally on the site, emphasizing and enhancing current vegetation features. The recovery plans for endangered species should also influence restoration effects. The additional minor habitat improvements that might be considered are:

3.3.5.1

Restore sand dune environment adjacent to the North Beach Parking Lot.

3.3.5.2

Remove encroaching vegetation from historic least tern nesting sites along the sewer berm. Also consider covering the sites with a layer of sand.

3.3.5.3

Re-establish cordgrass on an experimental basis in tidal channels once tidal action is restored.

3.3.5.4

Remove ice plant and other exotic species and establish tidal channels and salt marsh habitat in area bounded by Carmel Valley Road, the railroad embankment, and the North Beach Parking Lot access road.

3.3.5.5

Periodically remove illegal dumps and clean up litter around the perimeter of the lagoon.

3.3.6 PROVIDING PUBLIC ACCESS

The following actions will meet the objective of providing public access and educational opportunities consistent with resource protection. This implies concentrating park visitors where the area's resources can support the use and channeling people away from areas where sensitive resources would be impacted. (The first six recommended access improvements are drawn from the preliminary Torrey Pines State Reserve General Plan.)

3.3.6.1

Build a visitor center in the North Beach Parking Lot with interpretive displays about the marsh and lagoon ecosystem. Avoid, if possible, a net decrease in parking spaces.

3.3.6.2

Build a boardwalk extending south from the parking lot into the restored sand dune and marsh areas for interpretive purposes.

3.3.6.3

Build a pedestrian link between the North Beach Parking Lot and the

sidewalk of the North Torrey Pines Road bridge so pedestrians can have access to the south beach when the lagoon mouth is open.

3.3.6.4

Build a boardwalk from the lagoon mouth along the eastern shoulder of North Torrey Pines Road.

3.3.6.5

Build a trail from Flintkote Avenue to North Torrey Pines Road, bypassing the sensitive transitional areas between wetland and upland vegetation. Construct linking trails to North Torrey Pines Road.

3.3.6.6

Expand and improve the parking lot at the end of Flintkote Avenue and include interpretive facilities.

3.3.6.7

Construct and maintain fences and gates at either end of the sewer berm to prevent illegal vehicular entry to the wetland.

3.3.6.8

Develop interpretive displays about sedimentation, freshwater and salt marshes and riparian habitat in conjunction with the park and ride facility at the intersection of Carmel Valley Road and Sorrento Valley Road. Include a trail or boardwalk skirting the wetland to

Portofino Drive to improve pedestrian access.

3.3.6.9

Develop a viewpoint on Sorrento Valley Road at the crest of the hill overlooking the lagoon, if traffic safety considerations can be met. This may be accomplished in conjunction with road improvements or adjacent private development.

3.3.7 CONTROLLING SEDIMENTATION

Sedimentation is one of the most pressing problems affecting the continued health of the Los Penasquitos Lagoon system, particularly stream-born sediments from Carmel Valley Creek. In developing this plan, sedimentation control measures in the wetland were specifically considered and rejected as too environmentally damaging, and not strictly required in the wetland. The sedimentation control recommendations of the SANDAG Watershed Management Plan and the Karen Prestegaard study have been partially implemented, but background studies prepared for this plan indicate that even the existing rate of sedimentation is rapidly filling the lagoon wetlands.

3.3.7.1

Implement the SANDAG Watershed Management Plan recommendations for improved erosion control ordinances and enforcement and for public education. Publish standards for erosion control and the use of best management practices.

3.3.7.2

Preserve sediment storage areas identified by Prestegaard (1978) in their natural state. Only development that retains the current natural capacity and function of these areas to hold sediment from upstream or properly mitigates any disruption should be allowed.

3.3.7.3

Design in-stream improvements that would decrease erosion and slow downstream sedimentation. Estimate the cost of conserving, restoring, and maintaining stream channels, and identify sediment sources. Re-evaluate the desirability of a facility to remove sediment at the lower end of Carmel Valley. Also re-evaluate the costs, possible financing mechanisms, locations and environmental effects of sedimentation basin in Carroll Canyon and Los Penasquitos Canyon.

3.3.7.4

Evaluate the possibility of purchasing and improving sediment

EXHIBIT 1. p. 7

deposition areas in lower Carmel Valley as an alternative to sedimentation basins in the wetland. This will also serve to implement the open space policies of the North City West Community Plan. It will also ensure that developments do not preclude the redesign of the CalTrans I-5 project to eliminate encroachment on the Los Penasquitos Lagoon wetlands.

3.3.7.5

Establish one or more benefit assessment districts, maintenance districts, or other similar funding mechanisms as may be found acceptable by the City Attorney and City Council to implement a watershed management program. The district would fund conservation, restoration, and maintenance of stream channels and sedimentation control measures that cannot be funded as part of development applications. The concept should first be applied in Carmel Valley, with the possibility of later expansion to other areas. Alternatively, expand the existing program of lagoon enhancement fees to add a watershed enhancement fee to pay these costs.

3.3.7.6

Periodically clean and maintain detention basins and sediment storage ponds in the lagoon watershed.

Material removed from these facilities may be placed at appropriate points on the shoreline if the composition of the materials is suitable for beach replenishment.

3.3.7.7

Routinely clear accumulated sediment from the channelized section of the creek in Sorrento Valley to reduce flood hazards. Maintain a natural pilot channel of shrub/scrub riparian vegetation around the forested riparian areas at the downstream end of the channelized section so that the capacity of the flood way to handle flood flows is not further reduced. The City and Coastal Conservancy will work with landowners and the other Resources agencies to enhance wildlife habitat and improve floodflows along this section of the creek.

3.3.7.8

Cooperate with CalTrans in clearing sediment from the culverts under Interstate 5 and to upgrade the culverts as part of proposed freeway improvements. Ensure that any measures which require removing riparian vegetation are mitigated to the greatest extent feasible, and the need for future disruption of habitat areas is minimized.

3.3.7.9

Work with the Department of Parks and Recreation to install erosion control measures on the small tributary streams that drain directly into the lagoon system through State Park property.

3.3.8 MITIGATING WETLAND DEVELOPMENTS

The North City Land Use Plan indicates that no urban and/or major rural development should take place in the lagoon. The policies of Section 3.3.3. provide for purchase of privately-owned wetlands, buffers, and critical habitat areas. However, both public roadway improvements and private development projects that would involve alteration of wetland areas are currently proposed. Standards are needed to determine if these proposals are consistent with the enhancement objective of this plan. The wetland mitigation provisions of the Coastal Act and the California Coastal Commission's "Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas" apply in these circumstances. (Appendix H includes relevant sections of the Coastal Act.) They can be summarized in the following standards:

3.3.8.

The diking, filling or dredging of wetlands shall be permitted where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects (Public Resources Code Section 30233(a)). Diking, filling or dredging shall maintain or enhance the functional capacity of the wetland (Public Resources Code Section 30233(c)).

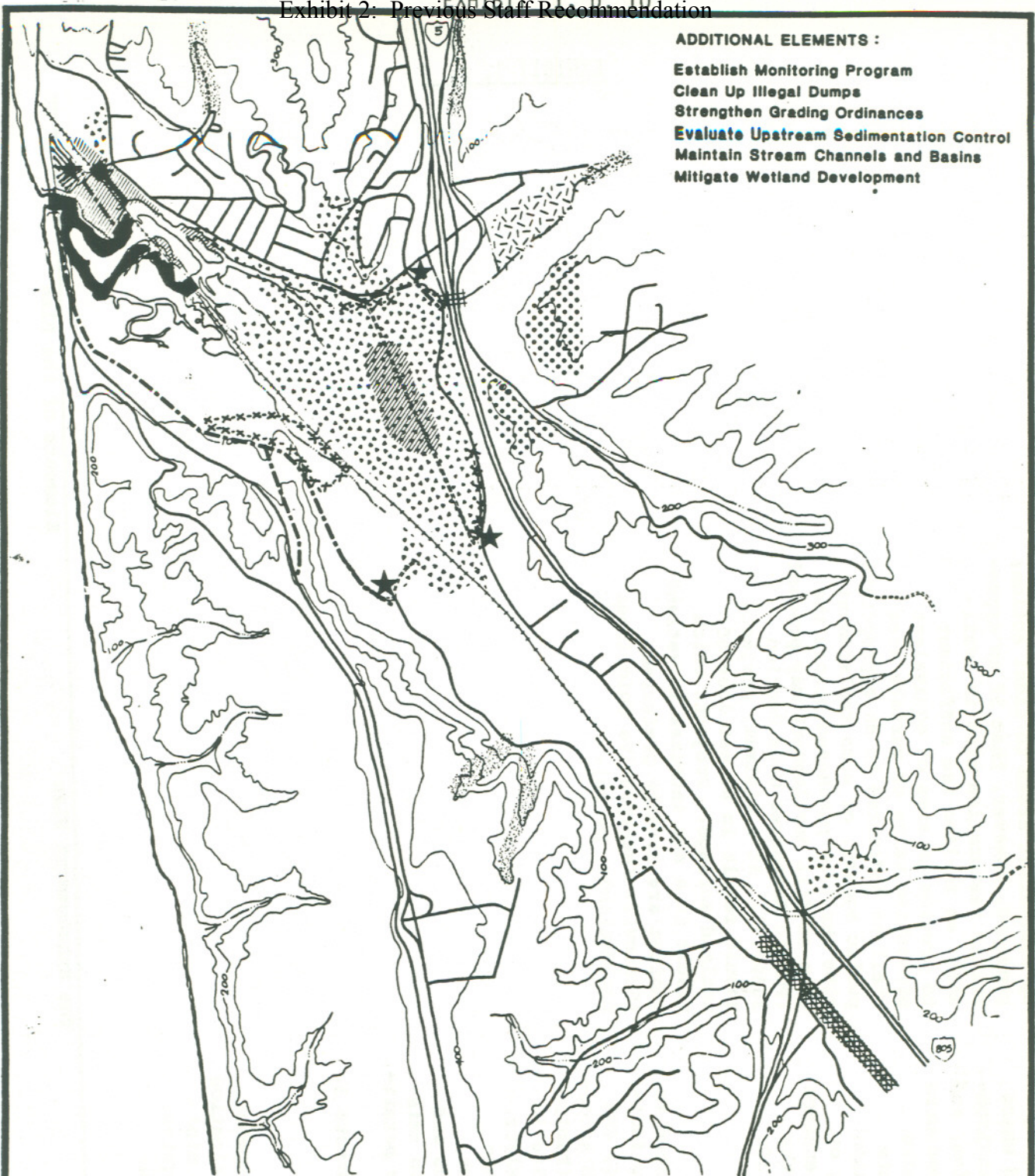
3.3.8.2

Any alteration shall be limited to very minor incidental public facilities, restorative measures, and nature study if otherwise in accordance with the Coastal Act (Public Resources Code Section 30233(c)). When no other alternative exists, and when consistent with other provisions of the Coastal Act, limited expansion of roadbeds and bridges necessary to maintain existing traffic capacity may be permitted (Statewide Interpretive Guidelines for Wetlands, footnote 3, p. 10).

3.3.8.3

When any dike and fill development is permitted in wetlands, mitigation measures shall include, at a minimum, either acquisition of equivalent areas of equal or greater

biological productivity, or opening up equivalent areas to tidal action; provided, however, that if no appropriate restoration site is available, an in-lieu fee sufficient to provide an area of equivalent productive value or surface area shall be dedicated to an appropriate public agency, or such replacement site shall be purchased before the dike or fill development may proceed (Public Resources Code Section 30607.1). At a minimum, projects should result in no net loss of wetland acreage. Projects which result in a net increase in wetland habitat are greatly preferred (Statewide Interpretive Guidelines for Wetlands, p. 26).



ENHANCEMENT PLAN

- Acquisition / Transfer
- Easements
- Dredging/Excavation
- Sediment Removal

- New Culverts
- Erosion Control
- Habitat Restoration
- Trail/Boardwalk

- Limited Access
- Interpretive Facility
- Possible Sediment Removal

FIGURE 12

LOS PENASQUITOS LAGOON ENHANCEMENT PLAN AND PROGRAM

Prepared by the State Coastal Conservancy



STATE COASTAL CONSERVANCY

Staff Recommendation
August 23, 1991

CONSENT ITEMS

File No. 78-046

STAFF
RECOMMENDATION:

Staff recommends that the State Coastal Conservancy adopt the following resolution, pursuant to Public Resources Code Sections 31000 *et seq.*:

"The State Coastal Conservancy hereby:

Authorizes the disbursement of one hundred thousand dollars (\$100,000) from the Los Peñasquitos Lagoon Enhancement Fund to the Los Peñasquitos Lagoon Foundation for continued enhancement implementation under Phase I of the Los Peñasquitos Lagoon Enhancement Plan approved by the Conservancy in October, 1985, subject to the following condition:

The Los Peñasquitos Lagoon Foundation shall submit quarterly reports to the Executive Officer of the Conservancy providing results of the monitoring program, and descriptions of efforts to open the lagoon mouth."

Staff further recommends that the Conservancy adopt the following findings:

"The State Coastal Conservancy hereby finds that:

1. The proposed disbursement of funds from the Los Peñasquitos Lagoon Enhancement Fund is consistent with the purposes and criteria set forth in Sections 31251-31270 of the Public Resources Code, regarding enhancement of coastal resources; and with the Los Peñasquitos Lagoon

Enhancement Plan approved by the Conservancy on October 30, 1985; and

2. The Los Peñasquitos Lagoon Foundation is a nonprofit organization existing under Section 501(c)(3) of the United States Internal Revenue Code, and has among its principal charitable purposes the restoration of Los Peñasquitos Lagoon, and the preservation of land for scientific, historic, educational, ecological, recreational, scenic or open space opportunities."

STATE COASTAL CONSERVANCY

Project Synopsis b.
August 23, 1991

PHASE I LOS PEÑASQUITOS LAGOON ENHANCEMENT

File No. 78-046
Project Manager: Laurel Marcus

REQUESTED ACTION: Authorization for disbursements not to exceed one hundred thousand dollars (\$100,000) from the Los Peñasquitos Lagoon Enhancement Fund escrow accounts to the Los Peñasquitos Lagoon Foundation for continued implementation of Phase I of the Los Peñasquitos Lagoon Enhancement Plan.

LOCATION: Los Peñasquitos Lagoon, City of San Diego

PROGRAM CATEGORY: Resource Enhancement

ESTIMATED COST:	State Coastal Conservancy	-0-
	Los Peñasquitos Lagoon Enhancement Fund	\$100,000

The Los Peñasquitos Lagoon Enhancement Account consists of fees assessed on building permits issued by the City of San Diego and the Coastal Commission in the coastal zone portion of the Los Peñasquitos Lagoon watershed. These funds are held by the Conservancy and may be spent only for enhancement activities in Los Peñasquitos Lagoon which have been approved by both the Conservancy and the Executive Director of the Coastal Commission.

PROJECT SUMMARY: In October 1985 the Conservancy approved the Los Peñasquitos Lagoon Enhancement Plan and authorized disbursement of \$76,000 to the Los Peñasquitos Lagoon Foundation to implement the first phase of the plan (Exhibit A). The Foundation continues to carry out this first phase, which consists of small scale periodic openings of the lagoon mouth with intensive monitoring of the effects of mouth openings, closings, storm inflows, and droughts on the lagoon's aquatic animals. The Foundation has now collected six years of scientific documentation of the effects of different water conditions on life in the lagoon.

The Foundation received a one-time grant of mitigation funds from the San Diego Regional Water Quality Control Board to carry on the mouth openings and monitoring program for the period 1989 to 1991. Funds are now needed from the Los Peñasquitos Lagoon Enhancement Fund to continue the periodic mouth openings and monitoring program for the next 3 years. The Los Peñasquitos Lagoon Enhancement Plan calls for continued mouth openings as a means of increasing water quality and estuarine habitat values in the lagoon. Without continued maintenance of the mouth, the lagoon remains closed off to tidal flows and experiences either very high salt levels in summer, or large freshwater inflows from

winter storms. The monitoring program has shown that both of these extreme conditions result in large die-offs of aquatic animals in the lagoon. The plan concluded that continued periodic openings of the mouth represents the most cost-effective and least environmentally damaging enhancement alternative.

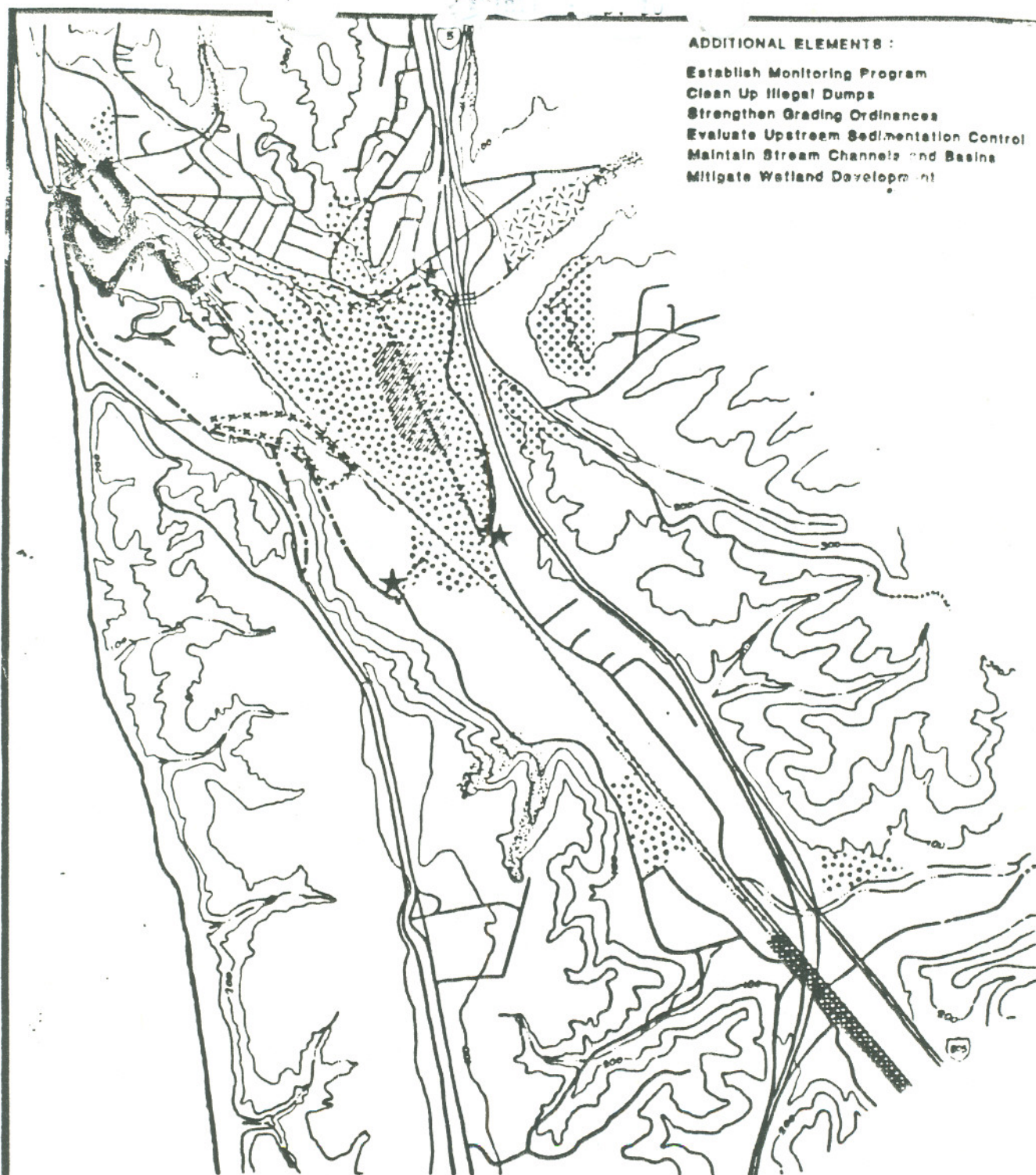
The Foundation currently holds permits from the California Coastal Commission and the Army Corps of Engineers to implement the Phase I enhancement program and open the mouth on a periodic basis.

The current funding recommendation would also allow the Foundation to have aerial photographs completed for the lagoon which can be used for vegetation mapping and analysis of long-term changes in habitat types.

The funding also provides for the Foundation to monitor the deposit of fees into the enhancement escrow account as required under development permits and, inform the Conservancy and the Coastal Commission of any discrepancies.

In October 1985, the Conservancy approved a Negative Declaration prepared for the implementation of the Los Peñasquitos Lagoon Enhancement Plan.

The Foundation and Conservancy staff have been developing a Phase II project for enhancing the lagoon. This project would dredge the tidal channels in the lower lagoon area and increase the tidal prism of the lagoon. However, this dredging project will cost over one million dollars and efforts to secure funds from a number of state and federal grant programs are ongoing.



ENHANCEMENT PLAN

- Acquisition / Transfer
- Easements
- Dredging/Excavation
- Sediment Removal

- New Culverts
- Erosion Control
- Habitat Restoration
- Trail/Boardwalk

- Limited Access
- Interpretive Facility
- Possible Sediment Removal

FIGURE 12

EXHIBIT A

LOS PENASQUITOS LAGOON ENHANCEMENT PLAN AND PROGRAM

Prepared by the State Coastal Conservancy

STATE COASTAL CONSERVANCY

Project Summary
January 17, 1996

LOS PENASQUITOS LAGOON ENHANCEMENT

File No. 78-046
Project Manager: Terri Nevins

RECOMMENDED ACTION: Authorization to disburse an amount not to exceed \$250,000 from the Los Penasquitos Lagoon Enhancement Fund Special Deposit Account to the Los Penasquitos Lagoon Foundation for continued implementation of the Los Penasquitos Lagoon Enhancement Plan, monitoring, and accounting.

LOCATION: Los Penasquitos Lagoon, City of San Diego (Exhibit 1)

PROGRAM CATEGORY: Resource Enhancement

ESTIMATED COST:	Los Penasquitos Lagoon Enhancement Fund	
	Special Deposit Account:	\$250,000
	State Coastal Conservancy:	-0-

The Los Penasquitos Lagoon Enhancement Fund Special Deposit Account (LPL Account) consists of fees assessed on building permits issued by the City of San Diego and the Coastal Commission in the coastal zone portion of the Los Penasquitos Lagoon watershed. These funds are held by the Conservancy and may be spent only for enhancement activities in Los Penasquitos Lagoon that have been approved by both the Executive Officer of the Conservancy and the Executive Director of the Coastal Commission. The balance in the LPL Account was \$600,000 as of September 1, 1995 (with an additional \$112,000 to be transferred to the LPL Account from Los Penasquitos Lagoon developer contributions currently in a local escrow account). The City of San Diego maintains an additional, separate account for fees assessed within City jurisdiction. The balance in the City of San Diego account is \$60,000.

PROJECT SUMMARY: Authorization to disburse funds from the LPL Account is needed to continue the periodic opening of the mouth of the lagoon, monitoring of biological conditions, and monitoring of the permits and deposits of required developer contributions. These activities are undertaken by the Los Penasquitos Lagoon Foundation pursuant to the adopted Los Penasquitos Lagoon Enhancement Plan and as required by the California Coastal Commission. The procedures, established a decade ago, have proven to be the most cost-effective and environmentally sound for managing the significant coastal resources of the lagoon.

STATE COASTAL CONSERVANCY

Staff Recommendation
January 17, 1996

LOS PENASQUITOS LAGOON ENHANCEMENT

File No. 78-046
Project Manager: Terri Nevins

STAFF
RECOMMENDATION: Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Public Resources Code Sections 31000 *et seq.*:

"The State Coastal Conservancy hereby:

- a. Authorizes the disbursement of two hundred fifty thousand dollars (\$250,000) from the Los Penasquitos Lagoon Enhancement Fund Special Deposit Account to the Los Penasquitos Lagoon Foundation for continued enhancement implementation of the Los Penasquitos Lagoon Enhancement Plan, approved by the Conservancy in October 1985, subject to the following condition:

The Los Penasquitos Lagoon Foundation shall submit quarterly written reports to the Executive Officer of the Conservancy providing:

1. Results of the monitoring program undertaken pursuant to the Plan;
2. Descriptions of efforts to open the lagoon mouth; and
3. An accounting of all funds received in connection with fees assessed on building permits, specifying for each fee its particular source, permit number, location of building, and permit jurisdiction."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the Staff Recommendation and accompanying exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed disbursement of funds from the Los Penasquitos Lagoon Enhancement Fund Special Deposit Account is consistent with the purposes and criteria set forth in Sections 31251-31270 of the Public Resources Code, regarding enhancement of coastal resources; and

with the Los Penasquitos Lagoon Enhancement Plan approved by the Conservancy on October 30, 1985; and

2. The Los Penasquitos Lagoon Foundation is a nonprofit organization existing under Section 501(c)(3) of the United States Internal Revenue Code, and has among its principal charitable purposes the restoration of Los Penasquitos Lagoon, and the preservation of land for scientific, historic, educational, ecological, recreational, scenic or open space opportunities."

STAFF DISCUSSION:

Project Description: An authorization to disburse funds from the Los Penasquitos Lagoon Enhancement Fund Special Deposit Account (LPL Account) to continue the periodic mouth openings and monitoring program for the lagoon is now needed. The Los Penasquitos Lagoon Enhancement Plan calls for continued mouth openings as a means of increasing water quality and estuarine habitat values in the lagoon. Without continued maintenance of the mouth, the lagoon remains closed off to tidal flows and experiences either very high salt levels in summer or large freshwater inflows from winter storms. The monitoring program has shown that both of these extreme conditions result in large die-offs of aquatic animals in the Lagoon. The plan concluded that continued periodic openings of the mouth represent the most cost-effective and least environmentally damaging enhancement alternative.

The biological monitoring program funded through developer fees is crucial to the implementation of the enhancement plan as the Coastal Commission requires data from the monitoring as a condition of issuing coastal permits to remove cobble and sand from the mouth of the lagoon to assure tidal flushing.

The Foundation maintains ongoing contracts with the Pacific Estuarine Research Laboratory, San Diego State University, for the monitoring of Lagoon conditions as required by the Coastal Commission. The funds for this purpose are available in the LPL Account. In fact, the funds in the LPL Account are restricted to use only in the Los Penasquitos Lagoon watershed.

The California Department of Parks and Recreation has granted the Foundation permission to enter the Los Penasquitos Marsh Natural Preserve and Torrey Pines State Beach for restoration purposes (Exhibit 2).

The Foundation currently holds permits from the California Coastal Commission and the Army Corps of Engineers to implement the enhancement program and open the mouth on a periodic basis.

Previous efforts to open the mouth at Los Penasquitos Lagoon have been successful and it is significant that other restoration programs at other wetlands are now using the low cost, low impact methods pioneered by the Los Penasquitos Lagoon Foundation and the Conservancy.

Funding from the LPL Account also provides for the Foundation to monitor the deposit of fees into the local escrow account as required under conditions of the development permits and to inform the Conservancy and the Coastal Commission of any discrepancies.

Site Description: Los Penasquitos Lagoon, at the northern edge of the City of San Diego, is about 16 miles from downtown. It lies just north of the junction of Interstates 5 and 805, between the coastal communities of Del Mar and La Jolla. The Lagoon's watershed consists of three parallel canyons running inland toward the foothills with a peak elevation of 2,900 feet. The watershed includes the fast-growing communities of Mira Mesa, Poway, Scripps Ranch, and North City West, and expanding areas of industrial and office development associated with Miramar Air Force Base and the University of California. The area is rapidly urbanizing.

Los Penasquitos Lagoon is one of the few remaining southern California coastal wetlands. Californians have filled, diked, dredged, or otherwise altered over three-quarters of the state's coastal wetlands. The loss has been especially heavy in the urbanized southern part of the state. The State Department of Fish and Game ranked Los Penasquitos Lagoon as one of the 19 coastal wetlands most in need of acquisition and protection. This lagoon is particularly important because of its large area of relatively undisturbed salt marsh vegetation.

Project History: The Conservancy assisted in the formation of the Los Penasquitos Lagoon Foundation in 1983. The Foundation provided a forum for debate about plan policies, organizing two workshops and more than a dozen discussion sessions. The Technical Advisory Committee provided useful suggestions.

The Plan, unique and innovative, was devised by a wide range of people with diverse interests in the Los Penasquitos Lagoon. The strong consensus about the necessary improvements in the environmental quality of the area emerged after two years of work.

In October 1985 the Conservancy approved the Los Penasquitos Lagoon Enhancement Plan and authorized disbursement of \$76,000 to the Los Penasquitos Lagoon Foundation to implement the first phase of the plan. The Foundation continues to carry out enhancement activities, which consist of small-scale periodic openings of the lagoon mouth with intensive monitoring of the effects of mouth openings, closings, storm inflows, and droughts on the lagoon's aquatic animals.

In 1987 the Foundation received a one-time grant of \$100,000 in mitigation funds from the San Diego Regional Water Quality Control Board to augment the ongoing Lagoon maintenance and monitoring program for the period of 1989 to 1991.

In 1991 the State Coastal Conservancy authorized the disbursement of \$100,000 from the LPL Account for continuation of the enhancement and monitoring program, consistent with the Los Penasquitos Lagoon Enhancement Plan and required by the Coastal Commission.

The Foundation has now collected a decade of scientific documentation on the effects of different water conditions on life in the lagoon. Over the last ten years the Foundation has supervised the opening of the lagoon mouth 36 times to improve water circulation, directed the biological monitoring program, and devised an exotic plants removal plan. During the past ten years the water quality has greatly improved, the mouth of the lagoon is maintained open all year, and the resulting tidal flushing greatly adds to the general health of the lagoon. Now that tidal flushing of the lagoon is assured, the Foundation is focusing on the severe problem of non-point source pollution.

The Los Penasquitos Foundation has been aggressive and successful in seeking other sources of funding for opening the lagoon mouth, expanding the biological monitoring program, and removing exotic vegetation. Other tasks that have been funded from sources other than the LPL Account are interpretive signs, a survey of erosion control in the coastal watershed, fencing along Sorrento Valley Road, the removal of soil contaminated with the diesel fuel at the three-acre Flintcote site, and restoration of the Flintcote property (purchased by the City of San Diego) and the adjoining 20 acres owned by the Conservancy to riparian habitat.

The Foundation received \$200,000 from Caltrans in 1995 for Interstate 5 (I-5) and State Route 15 (SR-15) mitigation to monitor watershed problems. The Foundation is using these funds to undertake additional hydrologic research, obtain ADAR satellite imaging, and address non-point source pollution. These important studies are not part of the ongoing monitoring and maintenance program funded by the LPL Account.

The mitigation for I-5 and SR-15 also requires the City of San Diego to survey erosion control devices within city limits of the watershed, prepare bi-annual reports with photos showing devices, evaluate conditions, and report actions taken to repair and maintain erosion control devices. This program is in effect for ten years.

To mitigate for a sewage spill last year, the City of San Diego is developing an exotic vegetation control program and interpretive signs.

Financing: A decade ago, the Coastal Commission had determined that watershed developers could mitigate off-site impacts related to sedimentation and water quality impacts if they contributed to a lagoon enhancement fund. This fund includes both residential and industrial developments in that part of the watershed in the coastal zone only. These fees are paid into a local escrow account, or if within City of San Diego jurisdiction, collected by the City. Funds from the local escrow account are then transferred to the LPL Account maintained by the State. All of these funds are jointly administered by the State Coastal Conservancy and the Coastal Commission.

The annual expense for biological monitoring is approximately \$25,000. Annual costs for maintaining the open mouth of the Lagoon vary from year to year due to the impact of tidal action and other natural conditions such as weather that modify conditions in the Lagoon. Costs ranging from \$20,000 to \$40,000 have been incurred for annual mouth openings.

The Conservancy's authorization is needed to disburse the funds from the LPL Account. Disbursement of funds under this authorization should continue through the year 2000.

Alternatives: The Conservancy manages the disbursement of funds from the LPL Account for Los Penasquitos Lagoon enhancement activities consistent with the adopted plan. All funds from the previous authorization to disburse funds from this account have been expended. The only alternative to the proposed recommendation would be for the Conservancy to decide not to manage the LPL Account and notify the Coastal Commission to identify an alternative responsible public agency.

Economic Benefits: The agreements prepared a decade ago requiring developers to contribute funds for the enhancement and restoration of the lagoon has enabled orderly development and economic activity to proceed. The current authorization would continue the procedures already established.

PROJECT SUPPORT: The proposed action is supported by the Los Penasquitos Lagoon Foundation, California Coastal Commission, California Department of Parks and Recreation, and the City of San Diego.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION: The proposed action is consistent with Chapter 6 of the Conservancy's enabling legislation, Division 21 of the Public Resources Code Sections 31251-31270. Pursuant to Section 31263, the Conservancy may authorize a nonprofit organization to undertake resource enhancement activities consistent with an approved resource enhancement plan for the area. The Los Penasquitos Lagoon Resource Enhancement Plan has been approved pursuant to Public Resources Code Section 31258.

**CONSISTENCY WITH
CONSERVANCY'S
PROGRAM GUIDELINES:**

The proposed project is consistent with the Conservancy's Enhancement Program Guidelines, adopted in March 1985, in the following respects.

Significance: The State Department of Fish and Game ranked Los Penasquitos Lagoon as one of 19 coastal wetland systems in need of acquisition and protection. This lagoon is particularly important because it boasts a large area of relatively undisturbed salt marsh vegetation, as compared to other wetland areas that have a higher proportion of intertidal and open water areas.

Need and Urgency: Funds previously authorized for Los Penasquitos Lagoon enhancement activities have all been expended. The proposed authorization is urgently needed to enable the ongoing monitoring and maintenance activities to continue uninterrupted.

Cooperation and Support: Implementation of enhancement activities at Los Penasquitos Lagoon is possible as a result of the cooperation and participation of developers, the Coastal Commission, the Los Penasquitos Lagoon Foundation, State Parks, the City of San Diego, and the Coastal Conservancy. This partnership has persisted for almost a decade.

Scope: The scope of the enhancement activities was determined during development of the Los Penasquitos Lagoon Enhancement. The funding mechanism and process was put into place a decade ago.

Management: The Los Penasquitos Lagoon Foundation, under contract with the Conservancy, has been responsible for the ongoing monitoring and maintenance of the lagoon resources pursuant to the adopted plan and for the monitoring of permits and developer contributions in the LPL Account. The Conservancy and Coastal Commission authorize all expenditures from the LPL Account.

Readiness to Act: All of the necessary procedures and contracts are already operational. Reauthorization of funds is all that is required for implementation.

Model: The Los Penasquitos Lagoon enhancement activities serve as a model for other wetland complexes in southern California. The low cost, low impact methods pioneered by the Foundation and the Conservancy are now being applied elsewhere.

**CONSISTENCY WITH
THE COASTAL ACT:**

On-going enhancement activities and biological monitoring at Los Penasquitos Lagoon is consistent with the management policies contained in Section 30231 of the Public Resources Code, which states that "the biological productivity and the quality of coastal

waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored. . . ."

COMPLIANCE

WITH CEQA: In October 1985 the Conservancy approved a Negative Declaration prepared for the implementation of the Los Penasquitos Lagoon Enhancement Plan. The proposed authorization will enable the continuation of activities provided for in the Plan.